

REMARKS

Upon entry of the instant amendment, claims 1-5 and 7-31 will remain pending in the present application. In the present Amendment, claims 1, 29 and 31 have been amended to further clarify features of the present invention. Further, claims 5, 11-13, 16, 17, 19-22, 24 and 27 stand withdrawn from consideration. No new matter has been added by way of these amendments. Accordingly, entry of the present amendment is respectfully requested.

In view of the following remarks, Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

Rejections under 35 U.S.C. § 103(a)

In the Office Action, claims 1-4, 8-10, 23, 25-26 and 28-31 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Zeuner U.S. '537 (U.S. Patent No. 6,132,537) (see paragraph 1 of the Office Action).

Next, claims 7 and 14 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Zeuner U.S. '537 in view of Zhou U.S. '369 (U.S. Patent No. 6,468,369) or Matsuda U.S. '767 (U.S. Patent No. 5,780,767) (see paragraph 2 of the Office Action).

Further, claim 18 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Zeuner '537 in view of Zhou '369 or Matsuda '767 (U.S. Patent No. 5,780,767) and further in view of Hinshaw U.S. '703 (U.S. Patent No. 5,970,703) (see paragraph 3 of the Office Action).

Further, claims 1-4, 7-10, 23 and 25-26 have rejected under 35 U.S.C. § 103(a) as being unpatentable over Scheffee U.S. '571 (U.S. Patent No. 5,861,571) (see paragraph 4 of the Office Action).

Finally, claims 14, 18 and 28-31 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Scheffee U.S. '571 in view of Taylor U.S. '147 (U.S. Patent No. 6,096,147) as applied above and further in view of Hinshaw U.S. '703 (see paragraph 5 of the Office Action).

Applicants respectfully traverse and request that the Examiner withdraw the rejections based on the following explanations.

Distinctions over the Cited References

First of all, Applicants emphasize that none of the cited references disclose or suggest employment of both melamine cyanurate and nitroguanidine for a gas generating composition for an air bag inflator, which is a feature of the present invention. (See independent claims 1, 29 and 31)

Distinctions over the Primary Reference Zeuner '537

The Examiner refers Applicants to column 2, lines 1-20 and 53-56 and claim 1 of the cited Zeuner '537 reference. (See paragraph "1." at page 2 of the Office Action.)

However, Zeuner '537 fails to disclose or suggest employment of both melamine cyanurate and nitroguanidine (i.e., "a mixture of melamine cyanurate and nitroguanidine as a fuel in an amount of 10 to 60% by mass" (emphases added)). Instead, Zeuner '537 merely discloses melamine, cyanuric acid, and its claim 1 (at column 5) discloses the "20-60%" or "95 to 5% by weight of a heterocyclic organic acid," but without referring to employment of both of melamine cyanurate and nitroguanidine and a specific amount thereof.

Thus, the Zeuner '537 reference fails to disclose or suggest the feature of the present invention.

Distinctions over Primary Reference Scheffee '571

The Examiner refers Applicants to the melamine, cyanuric acid derivative, cellulose binders and hydroxides disclosed at column 4 of Scheffee '571. Further, the Examiner also refers to "ammonium perchlorate" of Scheffee '571, which appears at column 3, line 39 of Scheffee '571.

However, these parts of Scheffee '571 do not equate to the feature of the instantly claimed melamine cyanurate (MC). Also, the reference to "and the like" at line 30 of column 4 of Scheffee '571 refers to other like ingredients of the list given at column 4, starting at line 27, but not to the instantly claimed MC salt.

Thus, Scheffee '571 also fails to disclose or suggest employment of both melamine cyanurate and nitroguanidine.

Further, the Scheffee '571 reference fails to disclose or suggest the feature of the present invention that Component (b) "is at least one oxygen-containing oxidant selected from the group consisting of basic copper nitrate, basic cobalt nitrate, basic zinc nitrate and basic manganese nitrate," as recited in independent claims 1 and 31.

Thus, the Scheffee '571 reference fails to disclose or suggest the feature of the present invention.

The Distinctions of the Secondary Cited References (Zhou '369, Matsuda '767, Hinshaw et al. '703 and Taylor et al. '147)

Similarly to the primary cited references as discussed above, the secondary cited references (Zhou '369, Matsuda '767, Hinshaw et al. '703 and Taylor et al. '147) also fail to disclose or suggest employment of both of melamine cyanurate and nitroguanidine and a specific amount thereof.

Therefore, the secondary cited references do not provide for one skilled in the art any motivation to arrive at the present invention.

Combination of the Cited References

A *prima facie* case of obviousness is not established even if the cited references are combined since none of the cited references disclose or suggest employment of both of melamine cyanurate and nitroguanidine and a specific amount thereof, which is recited in each of independent claims 1, 29 and 31. Likewise, it follows that a person having ordinary skill in the art would not be motivated by any of the teachings of the cited references and by the general knowledge to arrive at the present invention.

Accordingly, the present invention (independent claims 1, 29 and 31 and dependent claims) is not obvious over the cited references.

Unexpected Results

Applicants respectfully submit that the present invention has achieved unexpected results, whereby such results rebut any asserted *prima facie* case of obviousness (whether based on any

reference cited herein or combinations thereof). See *In re Corkill*, 711 F.2d 1496, 226 USPQ (BNA) 1005 (Fed. Cir. 1985); see also *In re Papesch*, 315 F.2d 381, 137 USPQ (BNA) 43 (CCPA 1963); *In re Wiechert*, 370 F.2d 927, 152 USPQ (BNA) 247 (CCPA 1967). As stated in M.P.E.P. § 2144.09 (see section entitled “*Prima Facie* Case Rebuttable By Evidence of Superior or Unexpected Results”), any rejection under 35 U.S.C. § 103(a) may be rebutted by a sufficient showing of unexpected results for the present invention.

The present invention is directed to a gas generating composition comprising at least a mixture of melamine cyanurate and nitroguanidine as a fuel component (a). By using both melamine cyanurate and nitroguanidine as a fuel, the present invention unexpectedly achieves advantageous results in low toxicity, a large combustion speed, a low combustion temperature and a reduced amount of toxic gases generated by combustion. Such advantageous results are evident from working Examples as shown in Table 1 at page 14 of the specification. For example, as comparing Examples 10 to 12, where both melamine cyanurate and nitroguanidine are employed, with Example 2, where only melamine cyanurate is employed (no nitroguanidine employed), Examples 10 to 12 exhibit better property in gas output (efficiency of gas generation). Further, as comparing Examples 14-15, where both melamine cyanurate and nitroguanidine are employed, with Examples 3-5, where only melamine cyanurate is employed (no nitroguanidine employed therein), Examples 14-15 exhibit better property in gas output (efficiency of gas generation). These advantages by using both melamine cyanurate and nitroguanidine are not described or suggested in any of the cited references.

Reconsideration and withdrawal of all § 103(a) rejections are respectfully requested as unexpected results for the present invention rebut any asserted *prima facie* case of obviousness.

CONCLUSION

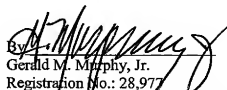
Based upon the amendments and remarks presented herein, the Examiner is respectfully requested to issue a Notice of Allowance clearly indicating that each of the pending claims are allowed under the provisions of Title 35 of the United States Code.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Toyohiko Konno (Reg. No. L0053) at the telephone number below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§ 1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,


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